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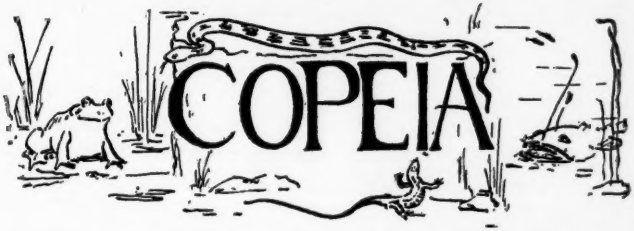

Published to advance the Science of cold-blooded vertebrates

A NEW RECORD FOR THE LUMPFISH IN CHESAPEAKE BAY.

This seems to be the second specimen to be recorded from Chesapeake Bay. It was caught in a trap off Wolf Trap Light, April 29, 1914, by E. L. Wilson, and later taken to the Bureau of Fisheries for identification. The specimen was a large one about 14¾ inches long, and full of ripe or nearly ripe eggs. B. F. tag 9548.

In *Forest and Stream,* August 3, 1907, page 178, Barton A. Bean records the capture of an adult female Lumpfish (*Cyclopterus lumpus*), at Buckroe Beach, Chesapeake Bay, about two miles north of Old Point Comfort. It was included in a shipment of fish to Messrs. Sheaffer & Stuart, of Washington, D. C., by Thomas V. Weber, April 14. After describing the specimen Bean says:

"The specimen here recorded is a female, apparently having spawned; seventy eggs passed freely from the fish while being measured."

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U. S. Bureau of Fisheries.

NOTES ON NEW JERSEY FISHES.

During the past season a number of New Jersey fishes have fallen under my notice. Though most of the species are common, several interesting associations and records are here given:

On May 19th, while at Sea Isle City, *Carcharias littoralis, Raja erinacea, R. ocellata, R. laevis, Pomolobus aestivalis, Brevoortia tyrannus, Scomber scombrus, Sarda sarda, Pomatomus saltatrix, Porontus triacanthus, Centropristis striatus, Stenotomus chrysops, Cynoscion regalis, Micropogon undulatus, Spheroides maculatus, Prionotus carolinus, P. strigatus, Paralichthys dentatus, Lophopsetta maculata, Merluccius bilinearis, Gadus callarias, Urophycis regius* and *U. chuss* were found; July 20th, *Carcharhinus milberti* and *Echeneis naucrates* were obtained; July 24th, *Sphyrna zygaena, Fundulus majalis, Menidia menidia notata, Trachinotus carolinus, Syngnathus fuscus* and *Menticirrhus saxatilis;* August 29th, *Trachinotus falcatus, Orthopristis chrysopterus* and *Bairdiella chrysura.*

Mr. W. J. Fox, who also secured some of the above, obtained *Caranx crysos, Stephanolepis hispidus* and *Anguilla chrisypa* at Carson's Inlet on August 11th. The last was an adult, and remarkable for its deformed body, being twisted in rather even undulations. I examined a small *Cyclopterus lumpus,* taken in the pound at Ocean City in late April, and was informed several others were also obtained. *Aleutera schoepfii* and *Urophycis regius* were also secured there June 21st; and *Synodus foetens* at Beesley's Point on September 10th.

Among fresh-water fishes, those of the Alexsocken Creek, above Lambertville, obtained July 22nd, contained three adults of *Rhinichthys cataractae.* These were the first I ever collected in New Jersey, and were taken in the rapids, associated with the very common *R. atronasus. Semotilus atromaculatus, Notropis cornutus, Fundulus diaphanus,* and *Boleosoma nigrum olmstedi* were also found. *R. atronasus* were very abundant in Jacobs Creek, near Harborville. A small collection from the Pompton River, near Mountain View, in Passaic County, contains *Semotilus bullaris, Notropis photogenis amoenus, Ambloplites rupestris, Lepomis auritus, Eupomotis gibbosus* and *Micropterus dolomieu.*

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SALAMANDERS COLLECTED IN WESTCHESTER COUNTY, N. Y.

1. *Amblystoma opacum* Gravenh.
2. *Amblystoma punctatum* Linn.
3. *Amblystoma jeffersonianum* Green.
4. *Hemidactylium scutatum* Tschudi.
5. *Plethodon cinereus* Green.
6. *Plethodon cin. erythronotus* Green.
7. *Plethodon glutinosus* Green.
8. *Spelerpes bilineatus* Green.
9. *Spelerpes ruber* Daudin.
10. *Desmognathus fusca* Raf.
11. *Diemyctylus viridescens* Raf.
12. *Diemyctylus vir. miniatus* Raf.

All these salamanders have been found by the writer to be fairly abundant, except the three species given below:

Amblystoma jeffersonianum Green, is my latest find. One specimen, only, was taken at Silver Lake Park, near White Plains, N. Y., about 1,000 feet from the lake, on a hill in the woods, at an altitude of about 100 feet from the level of the lake. The salamander was under a large flat rock, exposed to full sunshine, in soft, perfectly dry, almost dusty soil. It was covered with dust, but upon being handled, this rubbed off, and showed the salamander in its typical coloring. The color is dark brown above, with small, light blue spots on the sides, limbs, and sides of the tail; undersides bluish-black to gray. Length 4¾ inches from tip of snout to tip of tail. Following is a condensed description taken from Bulletin No. 34, U. S. Nat. Mus., pp. 89-92:

"Body cylindrically more slender . . . . than A. Punctatum. . . . The head is elongated, with muzzle obtuse . . . . The eyes are large . . . . the gular fold is distinct . . . . that behind the angle of the jaws is inconspicuous, as is the lateral parotoid furrow. There are twelve costal furrows. The tail is a little shorter than the body and head. It is oval in cross-section in the middle . . . . without any ridge or crest . . . . it becomes more and more compressed towards the tip. The limbs are largely developed and the toes very long. The digits are cylindrical and

without any basal web."

These external identification characters correspond exactly with the specimen.

Hemidactylium scutatum Tschudi has been taken repeatedly at Silver Lake Park, in the hills near the lake, usually in or under decaying logs. At first glance it resembles a pale specimen of Plethodon cinereus erythronotus, but the color is more nearly yellowish-brown. The undersides decide the question, being pure milky-white with small dark dots in *Hemidactylium* but lead colored, or pinkish-gray in *Plethodon*. The costal grooves are also very much more pronounced than in the other genus.

Spelerpes ruber Daud., one specimen (young), found in a brook near Silver Lake, is too well known to require description here. I only mention it on account of its apparent rarity in the district.

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ON ALFARO CULTRATUM.

Alfaro cultratum is one of the most interesting of the killifishes, and is abundant in the swift streams of certain portions of the lower Caribbean slopes of Costa Rica. Its most curious feature is a double row of scales that extend below the ventral body line, forming a thin edge, which is continuous with the keel formed by the flattened anterior portion of the body,

This is an evident adaptation for life in the very fast water which the fish inhabits, although the species does very well in an ordinary aquarium. It is one of the live bearing forms, and on one occasion a captive female approximately 70 mm. in length gave birth to 65 young, and, about three months later, to 75. The young average about 7 mm. in length, and the scales of the keel are plainly visible when the fish is held in a proper light. Most live-bearing Poecilliidae breed the year round in aquaria, and it seems probable that, where conditions are favorable, they do so also in the wild state.

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Edited by J. T. NICHOLS, American Museum of Natural History
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